



# Implementing a Lakehouse with Microsoft Fabric (DP-601)

## Description

### Understanding lakehouse implementation with DP-601

Data processing and analysis play a key role in the success of modern businesses. This course, titled “Implementing a Lakehouse with Microsoft Fabric (DP-601),” teaches you how to centralize and efficiently leverage your data. You will learn to use Microsoft Fabric to meet your organization’s analytics needs.

Through this training, you will master the creation and management of a data lakehouse, combining the flexibility of data lake storage with the analytical power of a warehouse. You will explore the essential features of Microsoft Fabric, including the use of Apache Spark and Delta Lake tables. This practical course will help you transform raw data into actionable insights.

### A practical and comprehensive approach

You will complete exercises to create lakehouses, ingest data, and orchestrate processes. You will also learn how to organize your data using the medallion architecture to optimize the performance and readability of analytics. Each module provides concrete skills that can be directly applied to your

## Course Content

### Module 1: Introduction to end-to-end analytics with Microsoft Fabric

- Discover the features of Microsoft Fabric
- Understand how the platform works
- Identify use cases for analytics needs
- Collaborate with data teams
- Enable and configure Microsoft Fabric

### Module 2: Getting started with lakehouses in Microsoft Fabric

- Explore the Microsoft Fabric lakehouse
- Work with lakehouses in Microsoft Fabric
- Transform data within a lakehouse
- Create and configure a lakehouse

### Module 3: Using Apache Spark in Microsoft Fabric

- Prepare to use Apache Spark
- Run Spark code
- Work with data in a Spark Dataframe
- Use Spark SQL for queries
- Visualize data in a Spark notebook

#### **Module 4: Working with Delta Lake tables in Microsoft Fabric**

- Understand the Delta Lake format
- Create and manage Delta tables
- Optimize Delta table performance
- Use Delta tables with Spark
- Integrate Delta tables with streaming data

#### **Module 5: Ingesting data with Dataflows Gen2 in Microsoft Fabric**

- Understand Dataflows Gen2 in Microsoft Fabric
- Explore Dataflows Gen2 functionalities
- Integrate Dataflows Gen2 with Pipelines

#### **Module 6: Orchestrating processes and data movement with Microsoft Fabric**

- Understand pipelines in Microsoft Fabric
- Use the Copy Data activity
- Leverage pipeline templates
- Run and monitor pipelines

#### **Module 7: Organizing a Fabric lakehouse using medallion architecture design**

- Describe the medallion architecture concept
- Implement medallion architecture in Fabric
- Query and report on data in the lakehouse
- Best practices for managing your lakehouse

#### **Lab / Exercises**

- This course provides you with exclusive access to the official Microsoft lab, enabling you to practice your skills in a professional environment.

#### **Documentation**

- Access to Microsoft Learn, Microsoft's online learning platform, offering interactive resources and educational content to deepen your knowledge and develop your technical skills.

#### **Participant profiles**

- Data Analyst
- Data Engineer
- Data Scientist

#### **Prerequisites**

- Understand data terminology
- Know the basics of data storage

- Have basic data analytics knowledge

## **Objectives**

- Create a lakehouse with Microsoft Fabric
- Use Apache Spark for analytics
- Leverage Delta Lake tables
- Ingest data with Gen2 dataflows
- Orchestrate data processes
- Design a medallion architecture

## **Description**

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## **Niveau**

Intermédiaire

## **Classroom Registration Price (CHF)**

900

## **Virtual Classroom Registration Price (CHF)**

850

## **Duration (in Days)**

1

## **Reference**

DP-601